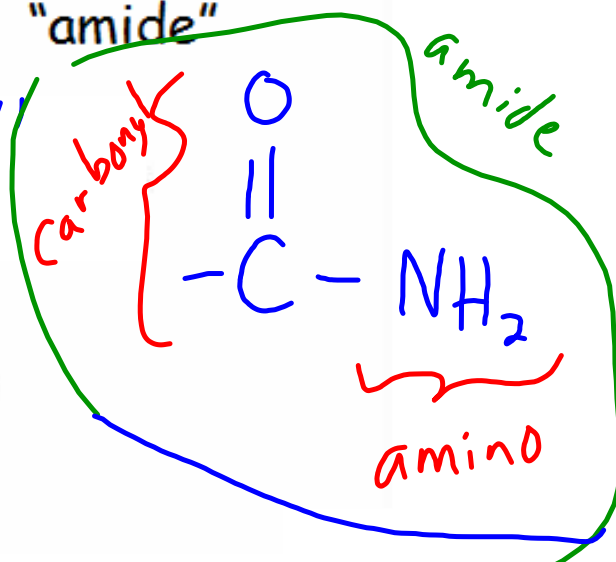
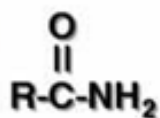


AMIDES -carbonyl group attached to nitrogen

Naming?: e from alkane changed to "amide"

"darn ole oxygen"

General formula



amide

amides

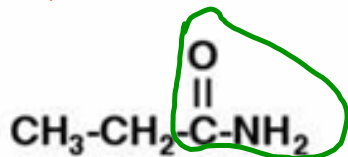
## Amide nomenclature

Similar to carboxylic acid.

*e*

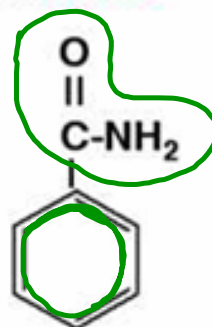
Drop **-oic acid** ending and replace with **amide**

Propanamide



Propanamide

Rules  
~~1~~



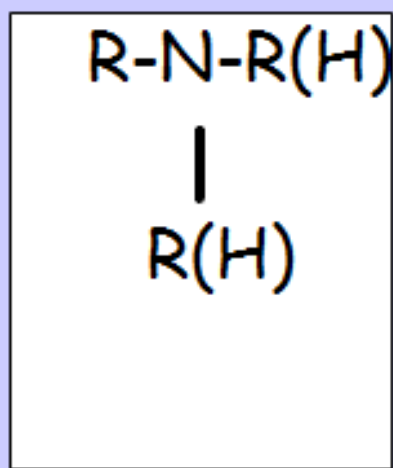
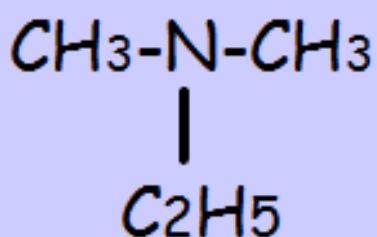
Benzamide

## Amines- NO OXYGEN

-very soluble due to H bonds

-Naming: alkyl group with amine

-Ex. Ethyl dimethyl amine

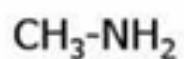


↓  
no oxygen

## Nomenclature

### Some common names

methylamine




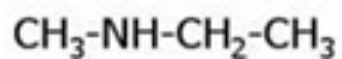
dimethylamine



ethylamine



methylethylamine

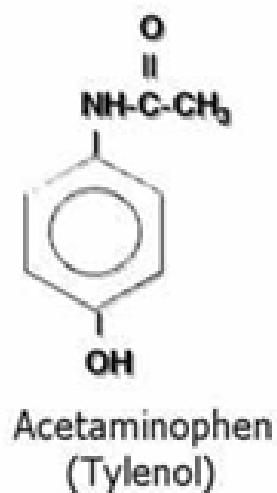
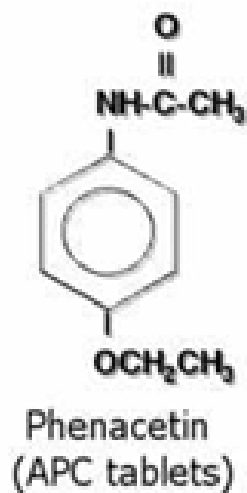


Common approach is to give alkyl name with amine extension.

## Amines of medical interest

Many amines have 'interesting' medical uses.

### Analgesics



Amines are similar to ammonia in that they are weak bases

→ The Stench of decaying proteins is usually because of amines.

Other examples:

Putrescine  $\text{H}_2\text{N}-(\text{CH}_2)_4-\text{NH}_2$

Cadaverine  $\text{H}_2\text{N}-(\text{CH}_2)_5-\text{NH}_2$

Skatole (in feces)

